

Application No. 09/940558
Page 2

Amendment
Attorney Docket No. S63.2B-9482-US01

Amendments To The Claims:

Claims 1-13 (Canceled).

14. (Withdrawn) A medical device comprising:
a guide wire, the guide wire having a layer of melt-processible PTFE.
15. (Withdrawn) The medical device of claim 14, wherein the melt-processible PTFE is extruded on the guide wire.
16. (Withdrawn) The medical device of claim 15, wherein the guide wire is a metal coil.
17. (Withdrawn) A method for making a catheter comprising the steps:
providing an inner shaft and an outer shaft, the inner and outer shafts having inner and outer surfaces;
extruding melt-processible PTFE onto the inner shaft; and
inserting the inner shaft into the outer shaft.
18. (Withdrawn) The method of claim 17, wherein the inner shaft and the PTFE are co extruded.
19. (Withdrawn) The method of claim 17, further comprising the step of inserting a guide wire into the inner shaft.
20. (Withdrawn) The method of claim 19, further comprising the step of extruding PTFE onto the guide wire.
21. (Withdrawn) The method of claim 19, further comprising the step of extruding PTFE onto the inner surface of the inner shaft.
22. (Withdrawn) The method of claim 17, further comprising the step of co extruding the outer shaft with a layer of PTFE.
23. (Withdrawn) The method of claim 17, further comprising the steps of providing a guide catheter, through which the outer shaft may pass, and extruding melt-processible PTFE onto the guide catheter.
24. (Withdrawn) The method of claim 23, wherein the guide catheter and the PTFE are co extruded.
25. (Withdrawn) A method for making a catheter balloon comprising the steps:
providing a balloon material;

Application No. 09/940558
Page 3

Amendment
Attorney Docket No. S63.2B-9482-US01

- extruding melt-processible PTFE onto the balloon material; and
mounting the balloon material onto a catheter.
26. (Withdrawn) The method of claim 25, wherein the balloon material and the PTFE are co extruded.
27. (Withdrawn) The method of claim 25, wherein the balloon material is PET.
28. (Withdrawn) A method of making a guide wire comprising the steps of:
providing a guide wire; and
extruding melt-processible PTFE onto the guide wire.
29. (Withdrawn) The method of claim 28, wherein the guide wire is formed via extrusion and wherein the guide wire and the PTFE are co extruded.
30. (Withdrawn) A method of making a medical device, the medical device chosen from the group consisting of biopsy forceps, medical tubes, vena cava filters, stents and pace maker leads, comprising the steps of providing the medical device and extruding melt-processible PTFE onto the medical device.
31. (Withdrawn) The method of claim 30, wherein the medical device is a stent.
32. (Withdrawn) The method of claim 31, wherein the stent is formed via extrusion and wherein the PTFE and the stent are co extruded.
33. (Withdrawn) A method for making a catheter comprising the steps:
forming a catheter shaft, wherein the catheter shaft is formed by co extruding melt-processible PTFE and a thermoplastic polymer chosen from the group consisting of fluoro copolymers, polyesters, polyamides and polyurethanes.
34. (Withdrawn) The method of claim 33, wherein the thermoplastic polymer is a fluoro copolymer chosen from the group consisting of a copolymer of tetrafluoroethylene with a perfluoroalkyl vinyl ether, a copolymerization of tetrafluoroethylene and perfluoromethylvinylether and a fluorinated ethylene-propylene resin.
35. (Withdrawn) A method for making a balloon for a catheter comprising the steps:
forming a balloon, wherein the balloon is formed by coextruding melt-processible PTFE and a thermoplastic polymer chosen from the group consisting of fluoro copolymers, polyesters, polyamides and polyurethanes.
36. (Withdrawn) The method of claim 35, wherein the thermoplastic polymer is a fluoro

Application No. 09/940558

Page 4

Amendment

Attorney Docket No. S63.2B-9482-US01

copolymer chosen from the group consisting of a copolymer of tetrafluoroethylene with a perfluoroalkyl vinyl ether, a copolymerization of tetrafluoroethylene and perfluoromethylvinylether and a fluorinated ethylene-propylene resin.

37. (Withdrawn) A method of making a stent delivery catheter comprising the steps:
providing a catheter shaft, the catheter shaft having a proximal end and a distal end;
loading a stent on the distal end of the catheter shaft;
forming a first stent retaining sleeve of a first material;
extruding melt-processible PTFE onto the first material; and
positioning the first stent retaining sleeve around at least a portion of the stent.

38. (Withdrawn) The method of claim 37, wherein the PTFE is coextruded with the first material.

39. (Withdrawn) The method of claim 38, wherein the first material is a thermoplastic polymer chosen from the group consisting of fluoro copolymers, polyesters, polyamides and polyurethanes.

40. (Withdrawn) The method of claim 39, wherein the thermoplastic polymer is a fluoro copolymer chosen from the group consisting of a copolymer of tetrafluoroethylene with a perfluoroalkyl vinyl ether, a copolymerization of tetrafluoroethylene and perfluoromethylvinylether and a fluorinated ethylene-propylene resin.

41. (Withdrawn) The method of claim 37, wherein the first stent retaining sleeve is capable of covering the entire stent and is retractable to release the stent.

42. (Withdrawn) The method of claim 37, further comprising:
forming a second stent retaining sleeve of the first material;
extruding melt-processible PTFE onto the first material of the second stent retaining sleeve; and
positioning the second stent retaining sleeve around at least a portion of the stent.

43. (Withdrawn) The method of claim 42, wherein the PTFE is coextruded with the first material to form the first and second stent retaining sleeves.

44. (Withdrawn) The method of claim 43, wherein the first material is a thermoplastic polymer chosen from the group consisting of fluoro copolymers, polyesters, polyamides and polyurethanes.

Application No. 09/940558

Page 5

Amendment
Attorney Docket No. S63.2B-9482-US01

45. (Withdrawn) The method of claim 44, wherein the thermoplastic polymer is a fluoro copolymer chosen from the group consisting of a copolymer of tetrafluoroethylene with a perfluoroalkyl vinyl ether, a copolymerization of tetrafluoroethylene and perfluoromethylvinylether and a fluorinated ethylene-propylene resin.

46. (Withdrawn) The method of claim 42, wherein the stent has a first end and a second end and the stent retaining sleeves both have first and second ends and wherein the first ends of the stent retaining sleeves are gripped to the catheter shaft and the second ends of the stent retaining sleeves are in contact with the ends of the stent.

47. (Withdrawn) A method of making a stent delivery catheter comprising the steps:
providing a catheter shaft, the catheter shaft having a proximal end and a distal end and a length;

loading a stent on the distal end of the catheter shaft;

forming a stent retaining sleeve;

positioning the stent retaining sleeve around the distal end of the catheter shaft and at least a portion of the stent;

forming a hypotube;

extruding melt-processible PTFE onto the hypotube; and

attaching the hypotube to the retaining sleeve such that the retaining sleeve may be retracted proximally along the catheter shaft to release the stent from the proximal end of the catheter shaft.

48. (Withdrawn) The method of claim 47, wherein the hypotube is metal.

49. (Withdrawn) The method of claim 47, wherein the hypotube extends along a substantial portion of the length of the catheter shaft.

50. (Withdrawn) A method of making a medical multi-layered tube comprising the steps of:
extruding melt-processible PTFE onto a first tube.

51. (Withdrawn) The method of claim 50, wherein the medical tube is a catheter tube.

52. (Withdrawn) The method of claim 50, wherein the first tube and the melt processible PTFE are coextruded.

53. (Withdrawn) The method of claim 50, wherein the first tube is made from a thermoplastic polymer chosen from the group consisting of fluoro copolymers, polyesters,

Application No. 09/940558

Page 6

Amendment
Attorney Docket No. S63.2B-9482-US01

polyamides and polyurethanes.

54. (Withdrawn) The method of claim 53, wherein the thermoplastic polymer is a fluoro copolymer chosen from the group consisting of a copolymer of tetrafluoroethylene with a perfluoroalkyl vinyl ether, a copolymerization of tetrafluoroethylene and perfluoromethylvinylether and a fluorinated ethylene-propylene resin.

55. (Withdrawn) The method of claim 50, wherein the melt-processible PTFE is extruded onto the inside of the first tube.

56. (Withdrawn) The method of claim 50, wherein the melt-processible PTFE is extruded onto the outside of the first tube.

57. (Withdrawn) The method of claim 50, wherein the melt-processible PTFE extruded on both the inside and the outside of the first tube.

58. (Withdrawn) The method of claim 57, wherein the three layers are co-extruded.

Claims 59-62 (Canceled)

63. (Currently Amended) A medical tube for inserting into the human body, comprising:

a tube having a first layer formed by the extrusion of a first material comprising a thermoplastic polymer and a second layer formed by the extrusion of a second material having a melt temperature, the first layer and the second layer being co-extruded at a temperature at or above the melt temperature of the second material, wherein the second material is a melt-processible poly(tetrafluoroethylene) composition, the melt-processible poly(tetrafluoroethylene) composition having a melt flow index value greater than 0 and less than 2.5 g/10 minutes, and wherein the thermoplastic polymer comprises a co-polymer, wherein the copolymer is a fluoro copolymer chosen from the group consisting of a copolymer of tetrafluoroethylene with a perfluoroalkyl vinyl ether, a copolymerization of tetrafluoroethylene and perfluoromethylvinylether and a fluorinated ethylene-propylene resin, the tube further comprising a third layer, the third layer formed by the extrusion of a third material having a melt temperature, the first layer, the second layer and the third layer being co-extruded, wherein the third material is a melt-processible poly(tetrafluoroethylene) composition, the melt-processible poly(tetrafluoroethylene) composition having a melt flow index value greater than 0 and less than 2.5 g/10 minutes, wherein the third layer being in direct contact with the first layer and wherein the first layer is between the second and third layers.

Application No. 09/940558

Page 7

Amendment

Attorney Docket No. S63.2B-9482-US01

64. (Previously presented) The medical tube of claim 63, wherein the medical tube is a catheter tube.
65. (Previously presented) The medical tube of claim 64, wherein the melt temperature of the second material exceeds 320 °C.
66. (Previously presented) The medical tube of claim 65, wherein the second material has an elongation to break of at least 10%.
67. (Previously presented) The medical tube of claim 66, wherein the second material has a crystallinity of 1-55%.
68. (Canceled).
69. (Currently Amended) The medical tube of claim 63 [[68]], wherein the three layers are thermally co-extruded above their melt temperatures.
70. (Previously presented) The medical tube of claim 64, the first layer having an inner and outer side, wherein the second layer is in contact with the inner side of the first layer.
71. (Previously presented) The medical tube of claim 63, the first layer having an inner and outer side, wherein the second layer is in contact with the outer side of the first layer.
72. (Previously presented) The medical tube of claim 63, wherein the tube is an inner catheter shaft.
73. (Previously presented) The medical tube of claim 63, wherein the tube is an outer catheter shaft.
74. (Previously presented) The medical tube of claim 63, wherein the tube is a catheter balloon.
75. (Previously presented) The medical tube of claim 63, the second layer being tractable.
76. (Previously presented) The medical tube of claim 67, the third layer being tractable and having a peak melting temperature of at least 320 degrees C, an elongation to break of at least 10% and a crystallinity of 1-55%.